

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/021532

BEST AVAILABLE COPY

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F21S8/00 F21V23/00 H05B35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F21S F21V H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | DE 100 11 077 A (GROMM HANS JOACHIM) 6 September 2001 (2001-09-06) column 1, line 1 - line 53; figure 1 | 1 |
| Y | ----- | 2,3 |
| Y | US 4 677 533 A (MCDERMOTT KEVIN ET AL) 30 June 1987 (1987-06-30) column 2, line 62 - column 5, line 14; figures 1,2,7 ----- -/-- | 2,3 |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

15 October 2004

Date of mailing of the international search report

03/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bader-Arboreanu, A

INTERNATIONAL SEARCH REPORT

In
national Application No
PCT/US2004/021532

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|--|
| X | WO 02/062106 A (KONINKL PHILIPS ELECTRONICS NV) 8 August 2002 (2002-08-08) page 1, line 16 - page 5, line 28; figure 1 | 5-7, 11 |
| Y | | 9, 14-20, 30, 32, 34, 37 |
| A | | 10, 12, 13, 21-23 |
| Y | ----- GB 2 239 306 A (LIMPKIN GEORGE ALAN) 26 June 1991 (1991-06-26) page 2, line 14 - page 3, line 33; figures 1-9 | 9, 14-20, 30, 32, 34, 37 |
| A | | 4, 8, 24-29, 31, 33, 35, 36, 38 |
| A | ----- US 5 984 494 A (BLOXHAM LAURENCE HASTINGS ET AL) 16 November 1999 (1999-11-16) column 1, line 45 - column 6, line 11; figures 1-9 ----- | 1-38 |

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

Int onal Application No
PCT, US2004/021532

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| DE 10011077 | A | 06-09-2001 | DE 10011077 A1 | 06-09-2001 |
| US 4677533 | A | 30-06-1987 | NONE | |
| WO 02062106 | A | 08-08-2002 | CN 1457622 T | 19-11-2003 |
| | | | EP 1360877 A1 | 12-11-2003 |
| | | | WO 02062106 A1 | 08-08-2002 |
| | | | US 2002118538 A1 | 29-08-2002 |
| GB 2239306 | A | 26-06-1991 | NONE | |
| US 5984494 | A | 16-11-1999 | US 5685637 A | 11-11-1997 |
| | | | GB 2307977 A | 11-06-1997 |

BEST AVAILABLE COPY